Claims

1. A method of manufacturing a thin film disk comprising the steps of:

recording a first timestamp for the end of thin film deposition for the disk;

waiting a predetermined time after the first timestamp to allow the thin film surface to stabilize;

applying a lubricant to the disk after the predetermined time has elapsed;

recording a second timestamp for applying the lubricant to the disk;

checking the second timestamp and rejecting the disk if a selected time period has been exceeded since the lubricant was applied, then performing an abrasive polishing of the disk; and

performing a glide test on the disk.

2. The method of claim 1 wherein the waiting step further comprises placing the disk at a designated location and using a timing aid to alert an operator when the disk is ready for lubrication.

3. The method of claim 1 wherein the lubricant has a perfluoropolyether backbone.

4. The method of claim 1 wherein the lubricant has an $X\text{-}CF_2\text{-}O\text{-}(CF_2\text{-}CF_2\text{-}O)_p\text{-}(CF_2O)_q\text{-}CF_2\text{-}X$ structure with X being $-CH_2OCH_2CH(OH)CH_2OH$.

5. The method of claim 1 wherein the lubricant is Fomblin Z-TETRAOL.

6. The method of claim 1 wherein the disk has a thin film overcoat of diamond-like carbon.

7. The method of claim 1 wherein the disk has a thin film overcoat of CHx.

8. The method of claim 1 wherein the disk has a thin film overcoat of CNx.

9. A method of manufacturing thin film disks comprising the steps of:

depositing at least one thin film on a disk;

reading an identifier from a carrier containing the disk;

recording a first timestamp indicative of a time when thin film deposition was completed, the first timestamp being recorded with the identifier in an automated database;

holding the carrier for a predetermined time to allow a surface of the thin film to stabilize;

after the predetermined time has elapsed, applying a lubricant to the disk;

recording a second timestamp with the identifier in an automated database, the second timestamp being indicative of a time when the lubricant was applied; and

reading the identifier and rejecting the disk if more than a selected time period has elapsed after the lubricant was applied or else performing an abrasive polishing of the disk.

10. The method of claim 9 wherein the holding step further comprises placing the disk at a designated location and using a timing aid to alert an operator when the disk is ready for lubrication.

11. The method of claim 9 wherein the lubricant has a perfluoropolyether backbone.

12. The method of claim 9 wherein the lubricant has an $X\text{-}CF_2\text{-}O\text{-}(CF_2\text{-}CF_2\text{-}O)_p\text{-}(CF_2O)_q\text{-}CF_2\text{-}X$ structure with X being $-CH_2OCH_2CH(OH)CH_2OH$.

13. The method of claim 9 wherein the lubricant is Fomblin Z-TETRAOL.

14. The method of claim 9 wherein the disk has a thin film overcoat of diamond-like carbon.

15. The method of claim 9 wherein the disk has a thin film overcoat of CHx.

16. The method of claim 9 wherein the disk has a thin film overcoat of CNx.